

ABSTRACT

A case or holster for the storage and transport of a cellular phone or similar battery powered communication device. The holster is adapted to be attached to and worn upon a person's body. The holster includes at least one photovoltaic element and circuitry that, in combination, enables solar energy to be used to charge a battery within the phone when the phone is disposed within the holster. The holster further includes a tilt-adjustable clip providing a means for tilting the holster with respect to the point of attachment of the clip to the wearer. The tiltable mount enables the orientation of the photovoltaic cell affixed to the surface of the holster to be varied with respect to the position of the sun in order to optimize the intensity of solar energy incident thereon. The holster includes a charging circuit and battery pack that is in electrical connection with the internal battery and charging circuitry of the phone when the phone is disposed within the holster. An LED array on the exterior surface of the holster indicates the insolation and the status of the solar charging circuitry within the holster. The charging circuit provides optimum power transfer from the photovoltaic element(s) to a secondary battery within the charging circuitry housed within the holster. In a second embodiment, a tilt-adjustable solar reflector, mounted on the holster, is employed to increase the intensity of light incident upon the photovoltaic element.